Hickey Lacourcière

#5

PAGE: 1

44

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/383,894

DATE: 01/31/2000 TIME: 11:23:51

Input Set: 1383894.RAW

This Raw Listing contains the General Information Section and up to first 5 pages.

```
1
     <110> APPLICANT: Li, Ming
 2
     <120> TITLE OF INVENTION: T-Type Calcium Channel
 3
     <130> FILE REFERENCE: 004.00191
     <140> CURRENT APPLICATION NUMBER: US/09/383,894
 4
     <141> CURRENT FILING DATE: 1999-08-26
 6
     <150> EARLIER APPLICATION NUMBER: US 60/098.004
 7
     <151> EARLIER FILING DATE: 1998-08-26
                                                             FNTERED
 8
     <150> EARLIER APPLICATION NUMBER: US 60/117,399
 9
     <151> EARLIER FILING DATE: 1999-01-27
     <160> NUMBER OF SEQ ID NOS: 11
10
11
     <170> SOFTWARE: PatentIn Ver. 2.1
     <210> SEQ ID NO 1
12
13
     <211> LENGTH: 7129
14
     <212> TYPE: DNA
15
     <213> ORGANISM: Rattus sp.
16
     <400> SEQUENCE: 1
17
           atggacgagg aggaggatgg agcgggcgcc gaggagtcgg gacagccccg tagcttcacg 60
18
           cageteaacg acetgteegg ggeeggggge eggeagggge eggggtegae ggaaaaqqae 120
19
           ccgggcagcg cggactccga ggcggagggg ctgccgtacc cggcgctagc cccggtggtt 180
20
           ttettetaet tgageeagga eageegeeeg eggagetggt gteteegeae ggtetgtaae 240
21
           ccgtggttcg agcgagtcag tatgctggtc attcttctca actgtgtgac tctgggtatg 300
22
           ttcaggccgt gtgaggacat tgcctgtgac tcccagcgct gccggatcct gcaggccttc 360
23
           gatgacttca tetttgeett etttgetgtg gaaatggtgg tgaagatggt ggeettggge 420
24
           atctttggga agaaatgtta cctgggagac acttggaacc ggcttgactt tttcattgtc 480
25
           attgcaggga tgctggagta ttcgctggac ctgcagaacg tcagcttctc cgcagtcagg 540
26
           acagteegtg tgetgegace geteagggee attaaceggg tgeeceageat gegeattete 600
27
           gtcacattac tgctggacac cttgcctatg ctgggcaacg tcctgctgct ctgtttcttc 660
28
           gtctttttca tctttggcat cgtgggcgtc cagctgtggg caggactgct tcgcaaccga 720
29
           tgcttcctcc ccgagaactt cagcctcccc ctgagcgtgg acctggagcc ttattaccaq 780
30
           acagagaatg aggacgagag ccccttcatc tgctctcagc ctcgggagaa tggcatgaga 840
31
           teetgeagga gtgtgeeeac actgegtggg gaaggeggtg gtggeeeacc etgeagtetg 900
32
           gactatgaga cctataacag ttccagcaac accacctgtg tcaactggaa ccagtactat 960
33
           accaactgct ctgcgggcga gcacaacccc ttcaaaggcg ccatcaactt tgacaacatt 1020
34
           ggctatgcct ggatcgccat cttccaggtc atcacactgg agggctgggt cgacatcatg 1080
35
           tacttcgtaa tggacgctca ctccttctac aacttcatct acttcattct tctcatcatc 1140
36
           gtgggctcct tcttcatgat caacctgtgc ctggtggtga ttgccacgca gttctccgag 1200
37
           accaaacage gggagagtea getgatgegg gageagegtg taegatteet gteeaatget 1260
38
           agcaccetgg caagettete tgagecagge agetgetatg aggagetact caagtacetg 1320
39
           gtgtacatcc tccgaaaagc agcccgaagg ctggcccagg tctctagggc tataggcgtg 1380
40
           cgggctgggc tgctcagcag cccagtggcc cgtagtgggc aggagcccca gcccagtggc 1440
41
           agetgeacte geteacaceg tegtetgtet gtecaceace tggtecacea ceateaceae 1500
42
           caccatcacc actaccacct gggtaatggg acgetcagag ttecceggge cageecagag 1560
43
          atccaggaca gggatgccaa tgggtctcgc cggctcatgc taccaccacc ctctacaccc 1620
```

actecetetg ggggecetee gaggggtgeg gagtetgtae acagetteta ceatgetgae 1680

PAGE: 2

RAW SEQUENCE LISTING PATENT APPLICATION US/09/383,894

Input Set: I383894.RAW

DATE: 01/31/2000

TIME: 11:23:51

tgccacttgg agccagtccg ttgccaggca cccctccca gatgcccatc ggaggcatct 1740

45 ggtaggactg tgggtagtgg gaaggtgtac cccactgtgc ataccagccc tccaccagag 1800 46 atactgaagg ataaagcact agtggaggtg gcccccagcc ctgggccccc caccctcacc 1860 47 agetteaaca teceaectgg geeetteage tecatgeaca ageteetgga gacacagagt 1920 48 acgggagect gecatagete etgeaaaate teeageeett geteeaagge agacagtgga 1980 49 gcctgcgggc cggacagttg tccctactgt gcccggacag gagcaggaga gccagagtcc 2040 50 gctgaccatg tcatgcctga ctcagacagc gaggctgtgt atgagttcac acaggacgct 2100 51 cagcacagtg acctccggga tccccacagc cggcggcgac agcggagcct gggcccagat 2160 52 gcagagccta gttctgtgct ggctttctgg aggctgatct gtgacacatt ccggaagatc 2220 53 gtagatagca aatactttgg ccggggaatc atgatcgcca tcctggtcaa tacactcagc 2280 54 atgggcatcg agtaccacga gcagcccgag gagctcacca acgccctgga aatcagcaac 2340 55 atogtottca coagoctott ogcottggag atgotgotga aactgottgt ctacggtccc 2400 56 tttggctaca ttaagaatcc ctacaacatc tttgatggtg tcattgtggt catcagtgtg 2460 57 tgggagattg tgggccagca gggaggtggc ctgtcggtgc tgcggacctt ccgcctgatg 2520 58 59 egggtgetga agetggtgeg etteetgeeg geeetgeage geeagetegt ggtgeteatg 2580 aagaccatgg acaacgtggc caccttctgc atgetectca tgetgttcat ettcatette 2640 60 agcatcctgg gcatgcatct ctttggttgc aagttcgcat ctgaacggga tggggacacg 2700 61 ttgccagacc ggaagaattt cgactccctg ctctgggcca tcgtcactgt ctttcagatt 2760 62 ctgactcagg aagactggaa taaagtcctc tacaacggca tggcctccac atcgtcttgg 2820 63 gctgctcttt acttcatcgc cctcatgact tttggcaact atgtgctctt taacctgctg 2880 64 gtggccattc ttgtggaagg attccaggca gaggaaatcg gcaaacggga agatgcgagt 2940 65 ggacagttaa gctgtattca gctgcctgtc aactctcagg ggggagatgc caccaagtct 3000 66 gagtcagage etgatteett ttegeceagt gtggatggtg atggggacag aaagaagege 3060 67 ttggccctgg tggctttggg agaacacgcg gaactacgaa agagcctttt gccaccctc 3120 68 atcatccata cggctgcgac accaatgtca ctacccaaga gctccagcac aggtgtgggg 3180 69 gaagcactgg gctctggctc tcgacgtacc agtagcagtg ggtccgctga gcctggagct 3240 70 gcccaccatg agatgaaatc tccgccaagt gcccgcagct ccccgcacag tccctggagt 3300 71 geggeaagea getggaeeag eaggegetee ageaggaaca geetgggeeg ggeeeeeage 3360 72 ctaaagcgga ggagcccgag cggggagcgg aggtccctgc tgtctggaga gggccaggag 3420 73 agtcaggatg aggaggaaag ttcagaagag gaccgggcca gcccagcagg cagtgaccat 3480 74 75 cgccacaggg gttccttgga acgtgaggcc aagagttcct ttgacctgcc tgacactctg 3540 caggtgccgg ggctgcaccg cacagccagc ggccggagct ctgcctctga gcaccaagac 3600 76 tgtaatggca agtcggcttc agggcgtttg gcccgcaccc tgaggactga tgacccccaa 3660 77 ctggatgggg atgatgacaa tgatgaggga aatctgagca aaggggaacg catacaagcc 3720 78 tgggtcagat cccggcttcc tgcctgttgc cgagagcgag attcctggtc ggcctatatc 3780 79 tttcctcctc agtcaaggtt tcgtctcctg tgtcaccgga tcatcaccca caagatgttt 3840 80 81 gaccatgtgg tectegteat catetteete aactgtatea ceategetat ggagegeece 3900 aaaattgacc cccacagege tgagegeate tteetgaeee tetecaacta catetteaeg 3960 82 gcagtctttc tagctgaaat gacagtgaag gtggtggcac tgggctggtg ctttggggag 4020 83 caggeetace tgegeageag etggaatgtg etggaegget tgetggtget cateteegte 4080 84 ategacatec tggtetecat ggtetecgae ageggeacea agateettgg catgetgagg 4140 85 86 gtgctgcggc tgctgcggac cctgcgtcca ctcagggtca tcagccgggc ccagggactg 4200 aagctggtgg tagagactct gatgtcatcc ctcaaaccca ttggcaacat tgtggtcatt 4260 87 tgctgtgcct tcttcatcat ttttggaatt ctcggggtgc agctcttcaa agggaagttc 4320 88 ttcgtgtgtc agggtgagga caccaggaac atcactaaca aatccgactg cgctgaggcc 4380 89 agctaccgat gggtccggca caagtacaac tttgacaacc tgggccaggc tctgatgtcc 4440 90 ctgtttgtgc tggcctccaa ggatggttgg gttgacatca tgtatgatgg gctggatgct 4500 91 gtgggtgtgg atcagcagcc catcatgaac cacaacccct ggatgctgct atacttcatc 4560 92 teetteetee teategtgge ettetttgte etgaacatgt ttgtgggegt ggtggtggag 4620 93 aacttccata agtgcagaca gcaccaggag gaggaggagg cgaggcggcg tgaggagaag 4680 94

PAGE: 3 RAW SEQUENCE LISTING DATE: 01/31/2000

PATENT APPLICATION US/09/383,894 TIME: 11:23:51

Input Set: 1383894.RAW

```
cgactacgga ggctggagaa aaagagaagg aatctaatgt tggacgatgt aattgcttcc 4740
 95
            ggcagctcag ccagcgctgc gtcagaagcc cagtgcaagc cctactactc tgactactcg 4800
 96
            agattccggc tccttgtcca ccacctgtgt accagccact acctggacct cttcatcact 4860
 97
            ggtgtcatcg ggctgaacgt ggtcactatg gccatggaac attaccagca gccccagatc 4920
 98
            ctggacgagg ctctgaagat ctgcaattac atctttaccg tcatctttgt ctttgagtca 4980
 99
100
            gttttcaaac ttgtggcctt tggcttccgc cgtttcttcc aggacaggtg gaaccagctg 5040
            gacctggcta ttgtgcttct gtccatcatg ggcatcacac tggaggagat tgaggtcaat 5100
101
            gettegetge ccatcaacce caccatcate egtatcatga gggtgeteeg cattgetega 5160
102
103
            gttctgaagc tgttgaagat ggctgtgggc atgcgggcac tgctggacac ggtgatgcag 5220
            gccctgcccc aggtggggaa cctgggactt ctcttcatgt tattgttttt catctttgca 5280
104
105
            getetgggeg tggagetett tggagaeetg gagtgtgatg agacacacce ttgtgaggge 5340
            ttgggtcggc atgccacctt taggaacttt ggtatggcct ttctgaccct cttccgagtc 5400
106
107
            tccactqqtq acaactqqaa tqqtattatq aaggacaccc tccgggactg tgaccaggag 5460
            tocacctgct acaacactgt catctcccct atctactttg tgtccttcgt gctgacggcc 5520
108
            cagtttgtgc tggtcaacgt ggtcatagct gtgctgatga agcacctgga agaaagcaac 5580
109
            aaagaggcca aggaggaggc cgagctcgag gccgagctgg agctggagat gaagacgctc 5640
110
            agcccgcagc cccactcccc gctgggcagc cccttcctct ggcccggggt ggagggtgtc 5700
111
            aacagteetg acageeetaa geetgggget ecacacacca etgeecacat tggageagee 5760
112
            tegggettet ceettgagea ecceaegatg gtaceceaec eegaggaggt geeagteeec 5820
113
114
            ctaggaccag acctgctgac tgtgaggaag tctggtgtca gccggacgca ctctctgccc 5880
            aatgacaget acatgtgeeg caatgggage actgetgaga gateeetagg acacagggge 5940
115
116
            tgggggetee ecaaageeea gteaggetee atettgteeg tteacteeea accageagae 6000
            accagetgea tectacaget teccaaagat gtgeactate tgetecagee teatggggee 6060
117
            cccacctggg gcgccatccc taaactaccc ccacctggcc gctcccctct ggctcagagg 6120
118
            cctctcaggc gccaggcagc aataaggact gactccctgg atgtgcaggg cctgggtagc 6180
119
            cgggaagacc tgttgtcaga ggtgagtggg ccctcctgcc ctctgacccg gtcctcatcc 6240
120
            ttctggggcg ggtcgagcat ccaggtgcag cagcgttccg gcatccagag caaagtctcc 6300
121
122
            aagcacatcc gcctgccagc cccttgccca ggcctggaac ccagctgggc caaggaccct 6360
            ccagagacca gaagcagctt agagctggac acggagctga gctggatttc aggagacctc 6420
123
124
            cttcccagca gccaggaaga acccctgtcc ccacgggacc tgaagaagtg ctacagtgta 6480
125
            gagacccaga gctgcaggcg caggcctggg tcctggctag atgaacagcg gagacactcc 6540
            attgctgtca gctgtctgga cagcggctcc caaccccgcc tatgtccaag cccctcaagc 6600
126
127
            ctcgggggcc aacctcttgg gggtcctggg agccggccta agaaaaaact cagcccaccc 6660
            agtateteta tagaececee ggagageeag ggetetegge ecceatgeag teetggtgte 6720
128
            tgcctcagga ggagggcgcc ggccagtgac tctaaggatc cctcggtctc cagccccctt 6780
129
            gacagcacgg ctgcctcacc ctccccaaag aaagacacgc tgagtctctc tggtttgtct 6840
130
            totgacocaa cagacatgga cocotgagto ctacocacto tococcatoa cotttotoca 6900
131
132
            ccgggtgcag atcctagctc cgcctcctgg gcagcgtttc tgaaaagtcc cacgtaagca 6960
133
            gcaagcagcc acgaggcacc tcacctgcct tcttcagtgg ctggtgggga tgacgagcag 7020
134
            aactteegga gagtegatet gaagagaaca cageeetgga geeeetgeet eegggaagaa 7080
                                                                               7129
135
            gqaaaaqqaq aaagcccagt gtggccaagg ctcccgacac caggagctg
136
      <210> SEO ID NO 2
      <211> LENGTH: 2374
137
138
      <212> TYPE: PRT
139
      <213> ORGANISM: Rattus sp.
140
      <400> SEQUENCE: 2
           Met Asp Glu Glu Glu Asp Gly Ala Gly Ala Glu Glu Ser Gly Gln Pro
141
                              5
142
            Arg Ser Phe Thr Gln Leu Asn Asp Leu Ser Gly Ala Gly Gly Arg Gln
143
144
                         20
                                             25
                                                                 30
```

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/383,894

DATE: 01/31/2000
TIME: 11:23:51 RAW SEQUENCE LISTING PAGE: 4

Input Set: 1383894.RAW

145	Gly	Pro	Gly	Ser	Thr	Glu	Lys		Pro	Gly	Ser	Ala		Ser	Glu	Ala
146			35				_	40	_		_		45		_	_
147	Glu	_	Leu	Pro	Tyr	Pro		Leu	Ala	Pro	Val		Phe	Phe	Tyr	Leu
148		50					55		_		_	60	_,		_	_
149		Gln	Asp	Ser	Arg		Arg	Ser	Trp	Cys		Arg	Thr	Val	Cys	
150	65		_			70			_	-	75	_	_	_		80
151	Pro	Trp	Phe	Glu	-	Val	Ser	Met	Leu		Ile	Leu	Leu	Asn		Val
152			-		85	_	_	_		90	1	_ ,	_	_	95	~1
153	Thr	Leu	GIA	Met	Phe	Arg	Pro	Cys		Asp	IIe	Ala	Cys	_	ser	GIN
154	_	-	_	100		~1	- 7 -	5 21	105	•	Dla a	-1 -	Dh.	110	Db	Dha
155	Arg	Cys	-	Ile	ьeu	GIN	Ата		Asp	Asp	Pne	TTE		Ala	Pne	Pne
156	• • •	**- 1	115	36-4	1	*** 7	T	120	17- 7	77.	T	a1	125	Dha	~1··	T
157	ALA		GIU	Met	vaı	vaı		Met	vai	ALA	Leu		тте	Pne	GIĀ	пув
158	7	130	TT	T	~ 3	7 ~~	135	m	7 ~~	7 200	T 011	140	Dho	Dho	т10	U a I
159		Cys	Tyr	Leu	GIY		THE	пр	ASII	Arg	155	Asp	Pile	PILE	TIE	160
160	145	*1-	~1	Met	T 011	150	TT: 220	e-~	T 011	λαν		Cln	λen	t/a l	gor	
161	IIe	Ата	GIY	Met	165	Giu	TAT	Det	пец	170	пеп	GIII	ASII	val	175	FIIC
162 163	Cor	772	17 a 7	Arg		T = T	λνα	v-1	T.211		Pro	T.A11	Δrα	Δla		Δsn
164	SEL	Ата	Val	180	1111	vai	Arg	Val	185	nr 9	110	ДСи	<i></i> 9	190	-1-0	71011
165	Δνα	₩ 1	Dro		Met	Δrα	Tle	T.e.11		Thr	Len	T.eu	T _i en		Thr	Leu
166	Arg	Val	195	DCI	I-IC C	g	110	200	• • • •	****		200	205	шър		
167	Pro	Met		Gly	Asn	Val	T.eu		Leu	Cvs	Phe	Phe		Phe	Phe	Ile
168		210	200	017			215			07.0		220				
169	Phe		Ile	Val	Glv	Val		Leu	Trp	Ala	Glv		Leu	Arg	Asn	Arq
170	225	1			2	230					235			,		240
171		Phe	Leu	Pro	Glu		Phe	Ser	Leu	Pro	Leu	Ser	Val	Asp	Leu	Glu
172	- 2				245					250				-	255	
173	Pro	Tyr	Tyr	Gln	Thr	Glu	Asn	Glu	Asp	Glu	Ser	Pro	Phe	Ile	Cys	Ser
174		•	-	260					265					270		
175	Gln	Pro	Arg	Glu	Asn	Gly	Met	Arg	Ser	Cys	Arg	Ser	Val	Pro	Thr	Leu
176			275					280					285			
177	Arg	Gly	Glu	Gly	Gly	Gly	Gly	Pro	Pro	Cys	Ser	Leu	Asp	Tyr	Glu	Thr
178		290					295					300				
179	Tyr	Asn	Ser	Ser	Ser	Asn	Thr	Thr	Cys	Val	Asn	Trp	Asn	Gln	Tyr	Tyr
180	305					310					315					320
181	Thr	Asn	Cys	Ser	Ala	Gly	Glu	His	Asn	Pro	Phe	Lys	Gly	Ala	Ile	Asn
182					325					330					335	
183	Phe	Asp	Asn	Ile	Gly	Tyr	Ala	Trp	Ile	Ala	Ile	Phe	Gln	Val	Ile	Thr
184				340					345		_			350		
185	Leu	Glu	Gly	\mathtt{Trp}	Val	Asp	Ile		Tyr	Phe	Val	Met		Ala	His	Ser
186			355	_	_			360			_		365		_	
187	Phe	-	Asn	Phe	Ile	Tyr		Ile	Leu	Leu	Ile		Val	GIĀ	Ser	Phe
188		370		_	_	-	375					380	~-	-1		~1
189		Met	Ile	Asn	Leu		Leu	Val	Val	Ile		Thr	Gln	Pne	ser	
190	385	_		_	~-	390	~?	- .		_	395	~ 7		11. 1	3	400
191	Thr	Lys	Gln	Arg		Ser	GIn	Leu	Met		GIU	GIN	Arg	vaı		rne
192	. .	a - ·	3		405	m1- ·	T	n1 -	a	410	G	~1	D	Q1	415	C
193	ьeu	ser	ASN	Ala	ser	rnr	ьeu	Ата		rue	ser	GIU	PLO		ser.	сув
194				420					425					430		

PAGE: 5 RAW SEQUENCE LISTING DATE: 01/31/2000 PATENT APPLICATION US/09/383,894 TIME: 11:23:51

Input Set: I383894.RAW

195	Tyr	Glu	Glu	Leu	Leu	Lys	Tyr	Leu	Val	Tyr	Ile	Leu	Arg	Lys	Ala	Ala
196			435					440					445			
197	Arg	Arg	Leu	Ala	Gln	Val	Ser	Arg	Ala	Ile	Gly	Val	Arg	Ala	Gly	Leu
198		450					455					460				
199	Leu	Ser	Ser	Pro	Val	Ala	Arg	Ser	Gly	Gln	Glu	Pro	Gln	Pro	Ser	Gly
200	465					470					475					480
201	Ser	Cys	Thr	Arg	Ser	His	Arg	Arg	Leu	Ser	Val	His	His	Leu	Val	His
202					485					490					495	
203	His	His	His	His	His	His	His	His	Tyr	His	Leu	Gly	Asn	Gly	Thr	Leu
204				500					505					510		
205	Arg	Val	Pro	Arg	Ala	Ser	Pro	Glu	Ile	Gln	Asp	Arg	Asp	Ala	Asn	Gly
206			515					520					525			
207	Ser	Arg	Arg	Leu	Met	Leu	Pro	Pro	Pro	Ser	Thr	Pro	Thr	Pro	Ser	Gly
208		530					535					540				
209	Gly	Pro	Pro	Arg	Gly	Ala	Glu	Ser	Val	His	Ser	Phe	Tyr	His	Ala	Asp
210	545					550					555					560
211	Cys	His	Leu	Glu	Pro	Val	Arg	Cys	Gln	Ala	Pro	Pro	Pro	Arg	Cys	Pro
. 212					565					570	_		_		575	_
213	Ser	Glu	Ala	Ser	Gly	Arg	Thr	Val	_	Ser	Gly	Lys	Val		Pro	Thr
214				580					585					590		
215	Val	His		Ser	Pro	Pro	Pro		Ile	Leu	Lys	Asp		Ala	Leu	Val
216			595				_	600					605	_		
217	Glu		Ala	Pro	Ser	Pro	_	Pro	Pro	Thr	Leu		Ser	Phe	Asn	Ile
218		610	_				615			_	_	620				
219		Pro	Gly	Pro	Phe		Ser	Met	His	Lys		Leu	GIu	Thr	Gln	
220	625		_			630	_		_		635	_	_	_	_	640
221	Thr	GLY	Ala	Cys		ser	ser	Cys	Lys		ser	ser	Pro	Cys	Ser	гля
222	_ =	_	_		645	_	~-7	_	_	650				_	655	
223	Ala	Asp	ser	_	Ala	Cys	GLY	Pro		ser	Cys	Pro	Tyr		Ala	Arg
224	_1	~-3		660	~ 7		~1	~	665	3		**- 7	M -4	670 D-0	3	G
225	Tnr	GLY		GIY	GLu	Pro	GIU		Ата	Asp	HIS	vaı		Pro	Asp	ser
226	-		675	~ 7 -	**- 1		~1	680	mla	~1 ~	7	71-	685	rri a	C0~	7 an
227	Asp		GIU	ALA	vaı	Tyr		Pne	THE	GIII	Asp		GIII	HIS	Ser	Asp
228	•	690	3	D	***		695	7	7 200	~1~	70 000	700	T 011	~1··	Dwo	7 an
229		Arg	Asp	Pro	HIR	710	Arg	Arg	Arg	GIII	715	ser	цец	Gry	Pro	720
230	705	G1	Dro	eo.	602		T 011	712	Dho	Tra		T.611	T1_	Cve	Asp	
231	Ald	GIU	PIO	ser	725	vaı	пеа	AIA	FIIC	730	Arg	neu	116	Суз	735	1111
232	Dhe	7.20	Tare	710		Nen	Sar	Tare	Tur		Glar	Δra	Glv	Tle	Met	Tle
233 234	FIIE	Arg	цуъ	740	vaı	Asp	Del	цуз	745	FILE	Gry	y	CLY	750	1100	110
235	λla	Tla	I.e.11		Δen	Thr	T.e.ii	Ser		Glv	Tle	Glu	Tyr		Glu	Gln
236	AIG	116	755	vai	VOII	1111	LLC U	760	MCC	Gry	110	Oru	765	1120	014	0 ±11
237	Pro	Glu		T.011	Thr	Λen	Δla		Glu	Tle	Ser	Δsn		Va 1	Phe	Thr
238	110	770	GIU	Leu	1111	AU44	775	cu			001	780				
239	Ser		Dhe	Δla	T.e.11	Glu		Len	T.em	Lvs	Len		Va1	Tvr	Gly	Pro
240	785	Lcu	1110	n.u	400	790	1100			-,5	795	u		-1-	1	800
241		Glv	Tter	Tle	Lve		Pro	Tvr	Asn	Πle		Asp	G] v	Va l	Ile	
242	FIIG	y	-1-		805			-1-		810			1		815	
243	val	Ile	Ser	Val		Glu	Ile	Val	Glv		Gln	Glv	Glv	Glv	Leu	Ser
	141		~ ~ ~	820					825			1	1	830		
Please Note:	. V I	L	Al - 4 :	-4								_				/

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY DATE: 01/31/200
PATENT APPLICATION US/09/383,894 TIME: 11:23:51

DATE: 01/31/2000

Input Set: 1383894.RAW

Line ? Error/Warning Original Text

890 W "N" or "Xaa" used: Feature required tngchatgga gmgnccy